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CONSTRUCTION AND EQUIPMENT

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CONSTRUCTION

OPERATIONS OF MINISTRY OF CONSTRUCTION MATERIALS INDUSTRY ANALYZED

Moscow TRUD in Russian 9 May 81 p 2

[Article by E. Gonzal'yez, special correspondent of TRUD: "The Construction Industry; the Sector's Horizons"]

[Text] Come In or Go Out?

Everything depends on your point of view. On the one hand it is easy to criticize the building materials industry--the results of recent years and for the 10th Five-Year Plan as a whole are completely sufficient reason for this.

On the other hand the sector's workers can be praised--more than 120 individual enterprises completed the five-year plan ahead of schedule and during the first quarter of this year the entire ministry also finally met the state plan.

What should be done--praise or curse them? Probably neither one nor the other. It is obviously early to praise the USSR Ministry of the Construction Materials Industry, and the sector is being criticized so often recently that ministry workers have begun to run away from representatives of control agencies and the press of which I am convinced by my own experience. They have even developed a defensive reaction--everyone hurriedly suggests: "Put yourself in our position...." And they begin to list the circumstantial reasons for the lag.

I have a counter proposal: comrades, let's take yourself out of your position. Let's try to look at the big industry--more than 800 associations and hundreds of thousands of workers--as if standing to the side--and let's attempt to calmly investigate just a few of its problems while not forgetting the circumstantial difficulties. The data from the research that was conducted recently by the department of wages and economic work in the AUCCTU will help us in this.

And so the USSR Ministry of the Construction Materials Industry fulfilled the quarterly plan for the first time in recent years. The question arises--is this the result of changes and qualitative improvements in the ministry's work or something else?

It is not difficult to answer--it is sufficient to remember that the 26th party congress took place at the end of February. The upsurge and enthusiasm during the pregress competition made it possible for many to achieve outstanding results.

However, one cannot really consider something outstanding that should be a law--the fulfillment of the state plan. In addition, enthusiasm is not a constant factor; people are not able to work at the limit of their capabilities all the time. Thus, the building materials industry already worked just a little bit worse in March than in February. The number of areas in which enterprises did not fulfill the programs increased and the number of collectives that are lagging behind increased--67 in February and 101 in March. The sector retreated from its conquered positions a little bit more in April.

Everything is normal--one cannot count just on enthusiasm; industry is in need of a constant increase in the quality of production. I did not make a slip in speaking--precisely production and not just products. I hope that further on it will become clear what is meant.

The Most Painful Area

Plants, like people, are born, reach maturity, gain strength, get old and, if they are not renovated, they die. The enterprises in the brick industry illustrate this conformity with the law very graphically.

Coming into being long ago they were at their peak power in the preindustrial period of construction. Then reinforced concrete took over the summit. Its industry was developed, changed and improved while the brick seemed to have lived out its days.

There is very little about which people are not mistaken! And a blunder was made with the brick also. It turned out that it was impossible to get by without it in the future. The brick lives but brick plants have begun to die. Several physically and almost all morally.

It goes without saying that no one specially destroyed them, they were simply deprived of new ideas or resources for a long time. And for industry a halt in growth is a slow death. Today, outmoded simple drying chambers are in operation at the majority of ceramic wall materials plants (more than six percent of the brick clay simply dries in barns), half of the enterprises operate ancient kilns that consume excessively large amounts of heat and a very small output of suitable products--about 70 percent in all and the rest is waste. The amount of manual labor at brick plants is so great that I do not wish to name absolute figures. It is sufficient to say that a third of the employees in the sector are working on the brick which does not occupy the most prominent position in the ministry's products list by far.

Working conditions are bad here, wages for unqualified workers are not high and there are almost no bonuses and similar favors since the plan is not fulfilled. In general it is not difficult to guess that the turnover of personnel in the brick industry is great and there are never enough people.

Obviously, the brick is the sector's most painful area. Things are much better in the cement, glass and other industries. And there are simply outstanding enterprises with modern equipment, a stable work force, and available housing, kindergartens and such. Even certain brick plants can be grouped among them, for example, the Borskiy and Ladyzhin plants.

However, this is more the result of the efforts of local administrators than the ministry's technological policy. Therefore, the sector, on the average, occupies one of the last places in the level of mechanized labor--about 45 percent--there is much outmoded equipment at enterprises and 70 to 80 percent of the plans for adopting new technology and for mechanizing and automating production are completed year after year.

In general, the sector obviously does not have sufficient scientific provisions--new technical ideas, technological processes and structural approaches. In a word, such scientific preparatory work which would have made it possible, maybe not immediately and maybe not tomorrow, to transfer the industry to a new qualitative level in time. And it is stranger still that there are more than 30 sufficiently strong scientific research and design organizations in the ministry.

Forty Percent. Who Wants To Go Higher?

For a long time these organizations worked basically for themselves. Nine-tenths of the resources that were invested in science went toward subjects that did not have an outlet in production. Therefore, it is possible to detect some progress only in the ceramic and glass industries. One must turn to foreign expertise for new ideas for the cement, cardboard, asbestos and other subsectors.

Today, something has already changed. While implementing the party and government's decree concerning an improvement in the economic mechanism the ministry transferred all of its institutes to cost accounting and it turned out that only one-tenth of the resources are needed for pure science and the rest...the rest lay as the basis of an extensive plan for the technological development of the sector which had already been approved by colleagues in the ministry.

Is it so that all of the problems are solved and we can conclude our discussion? Several workers in the ministry consider it to be just that way. But the discussion must be continued. For you cannot build a housing unit from even the finest plan. The plan still has to be implemented.

Let's return to the same brick industry. There is also a special purpose program for it. And the means to realize it? They are still lacking. "They will provide them," the ministry workers say with conviction, having USSR Gosplan in mind.

Let's assume this. And what then? There is not only no design for a new brick plant but not even a conception as to what it should be--it is not for nothing that I spoke about a lack of scientific preliminary work. And one has to negotiate for a half year and maybe even a year with the Ministry of Construction, Road and Municipal Machine Building--the principal supplier of equipment for the sector--just to order a machine or a production line. In addition, building a plant is just a small thing--it must be utilized. The workers of today will not be able to do that--for at present they are seeking principally longshoremen and then they will need...it's unknown who but just very qualified people.

Certainly all of these are surmountable difficulties. But time! Time and resources.... Where can they be gotten? There is not enough to fulfill the plan. It seems it is

absurd to speak about any kind of potentials in such a situation. However, they exist precisely in the USSR Ministry of the Construction Materials Industry. Only not in the form of spare capacities but in another form.

For example, one of the potentials is the use of capital investments. For a long time only 20 to 25 percent of resources were allocated here toward the technological retooling of enterprises and the rest toward new construction. And this new construction only worsened the ministry's situation which was bad even without that--due to imperfections and errors it was rare when the work reached the stage of developing the capacities. The plan was cast aside and the products came up short. For example, due to this reason the sector will fail to provide millions of tons of cement.

Several specialists consider it necessary to allocate approximately 40 percent of capital investments toward modernizing production today. Others name even larger figures. Where the truth lies is unknown and will not be made clear until such time as the ministry works out a uniform technological and economic policy to which all activity will be subordinate.

There is also one more important potential but it must be talked about specially.

With No Right To Err

They decided to build the Fokinskiy ceramic drainage pipe plant from imported equipment. Theoretically it made it possible to completely automate production. In practice they decided to economize and did not buy mechanisms for unloading pipes in a heat reducing film (they acquired, as they say, an incomplete set of equipment). Now, 88 people are occupied with moving pipes by hand at the new plant. While doing this they beat up such a quantity of products that it is cheaper to buy twice as much imported technology.

We will not start to make a naive face--such examples can also be found in other sectors. But we will not forget about the situation which the building materials industry is in--what for others is no big loss is simply a ChP [extraordinary event] for the Ministry of the Construction Materials Industry which reduces the level of manual labor by only 0.5 percent a year.

But there are really many such mistakes. Automated production lines should have been installed at the Zelenograd ceramic drainage pipe plant. They were not installed. And now 200 workers load pipes manually onto kiln wagons.

They built a shop at the Tselinograd ceramic combine and it quickly went to pieces. They still haven't figured out whether it was errors in design or execution.

Mistakes, mistakes.... They build a plant--it turns out there is no one to work there. Or the manpower exists but the plant is not needed in that place.

Do you understand what I mean--toward what end is the time and manpower going? Not for creating a qualitatively new product or a new level of production but to correct mistakes in old, well-known work.

I would like to make a stipulation once again--to present the sector's work as a chain of continuous miscalculations is totally incorrect. There are many good enterprises here and they have their own achievements but there are also mistakes. And the building materials industry does not have the right to make them--there are enough worries without that. So repairs not specified in the plan and all breakdowns, the slow development of capacities, the disruption of technology and labor discipline, errors in managing production--all of this is an impermissible luxury for the ministry. For in accordance with the resolutions of the 26th CPSU Party Congress the sector must not only increase the volume of production for cement, slate, asbestos and facing tiles and so forth this year already but also build up the output of more efficient materials by more advanced technology.

What should I end with? Comrade L. I. Brezhnev said in his report at the congress: "It is now within our power, comrades, to solve the largest and most complicated problems. But the matter, it would seem, which is very simple and trivial--of having a master's attitude to public property and an ability to completely and expediently utilize all that we have will become the core of the economic policy." The plan for the technological development of the building materials industry could be called a "large and complex program." And this problem cannot be solved without that ability to expediently utilize what already exists about which comrade L. I. Brezhnev spoke.

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CSO: 1821/094

CONSTRUCTION

STATUTE ABOUT MINISTRY OF CONSTRUCTION IN FAR EAST AND ZABAYKAL' ISSUED

Moscow SOBRANIYE POSTANOVLENIY PRAVITEL'STVA SOYUZA SOVETSKIKH SOTSIALISTICHESKIKH RESPUBLIK in Russian No 24, 1980, pp. 592-597

[Article 147: "Concerning Approval of the Statute of the Ministry of Construction in the Far East and Zabaykal' Rayons"]

[Text] The USSR Council of Ministers resolves:

To approve the attached statute about the Ministry of Construction in the Far East and Zabaykal' rayons.

Deputy Chairman of the USSR Council of Ministers N. Tikhonov

Administrator of Affairs in the USSR Council of Ministers M. Smirtyukov

Moscow, Kremlin. 18 September 1980 No 812.

Approved by USSR Council of Ministers

Decree No 812 dated 18 September 1980.

The Statute Concerning the Ministry of Construction in the Far East and Zabaykal' Rayons

1. The Ministry of Construction in the Far East and Zabaykal' Rayons is an all union ministry.

The Ministry of Construction in the Far East and Zabaykal' Rayons directs the erection of structures of industrial importance in the rayons of their activity irrespective of the sector of the national economy to which it is related and also housing units and structures for cultural and everyday purposes.

The Ministry of Construction in the Far East and Zabaykal' Rayons bears responsibility for the condition of the construction that is carried out by subdepartmental organizations, that the programs for putting production capacities and structures into operation are completed on time, and also for the condition and development of the construction industry and for building up the capacities of construction and installation organizations.

2. The main tasks of the Ministry of Construction in the Far East and Zabaykal' Rayons are:

to implement the programs for putting production capacities and structures into operation, the plans for construction and installation work and also to ensure that state discipline is strictly observed;

to increase the efficiency of construction production, improve the use of fixed assets, and labor, material and financial resources;

to carry out the further industrialization of construction, increase the level of specialization in construction production, improve the organization and technology of construction and installation work, and adopt the latest achievements of science, technology and advanced expertise in construction;

to develop an industrial base for construction organizations, increase the effectiveness of capital investments that are allocated for these goals, and the specialization and cooperation of the enterprises in the construction industry;

to ensure a growth in labor productivity and a reduction in the cost of construction and installation work;

to improve quality and reduce the duration of construction;

to participate, in accordance with the plans for contract work, in the construction of agricultural enterprises in rayons adjacent to the areas where new industrial enterprises are being built in the Far East and Zabaykal';

to adopt the scientific organization of labor, further improve management, and provide enterprises, institutions and organizations under its jurisdiction with qualified personnel;

to improve housing, cultural and everyday conditions for the laborers and workers of the enterprises, institutions and organizations in the ministry's system, create safe working conditions for them and adopt new methods and means of preventing industrial occupational injuries.

3. The Ministry of Construction in the Far East and Zabaykal' Rayons directs the enterprises, institutions and organizations under its jurisdiction directly or through agencies formed by it.

The Ministry of Construction in the Far East and Zabaykal' Rayons, the territorial agencies under its jurisdiction that supervise construction, construction and installation and other specialized organizations, enterprises in the construction industry, transportation and other enterprises, institutions and organizations comprise the unified system of the Ministry.

4. The Ministry of Construction in the Far East and Zabaykal' Rayons is guided in its activities by the laws of the USSR, other resolutions by the USSR Supreme Soviet and

its Presidium, decrees and regulations by the USSR Council of Ministers, the General Statute Concerning USSR Ministries, the current statute, and also other normative acts and ensures that the legislation that is in force is correctly adopted at enterprises, institutions and organizations in the ministry's system.

The Ministry of Construction in the Far East and Zabaykal' Rayons generalizes the practice of adopting legislation into the ministry's system, works out proposals for improving it and submits them to the USSR Council of Ministers for review according to the established procedure.

5. The Ministry of Construction in the Far East and Zabaykal' Rayons, along with carrying out the functions specified in the General Statute Concerning USSR Ministries in the area of planning, science and technology, capital construction, material and technological supply, finances and credit, personnel, labor and wages and also in the area of economic, scientific, technical and cultural contacts with foreign countries:

- a) ensures that construction and installation work is completed on time by the organizations in the ministry's system first of all at starting structures and complexes and also at structures that are built by foreign licenses, on the basis of completely imported equipment or with participation by organizations from other countries;
- b) organizes the work, according to the established procedure, for coordinating the title lists and estimates of construction with the construction and installation organizations in the ministry's system and the clients and for accepting the design and estimate documentation, and also ensures that advanced forms of accounting for completed construction work are adopted;
- c) works out schemes for developing and locating enterprises and organizations in the ministry's system while taking into consideration the suggestions of the RSFSR Council of Ministers and USSR ministries and departments that carry on construction in the rayons of the ministry's activity and in rayons associated with it;
- d) carries out measures for improving the quality of construction, for adopting progressive designs for producing work and advanced technology at the construction sites, for increasing the level of mechanization of construction and installation work and the effectiveness of using machines and mechanisms in construction, and for the consolidation and specialization of construction and installation organizations;
- e) ensures that work is produced by the resources of the enterprises and organizations in the ministry's system in accordance with designs, construction norms and regulations, standards and technical conditions;
- f) creates the necessary conditions, together with the appropriate ministries and departments, for the subcontract organizations to fulfill the installation and special construction work properly and on time;
- g) works out and presents to USSR Gosstroy the technical and economic requirements for creating new construction machinery, mechanized tools and specialized means of transportation and takes part in conducting the acceptance tests on them;

h) ensures that the required building materials, components and parts are produced at the enterprises in the ministry's system in accordance with approved plans and also the small size means of mechanization and nonstandard equipment that is not supplied by industry;

i) organizes the transportation of building materials, articles and components by technological and other specialized transportation;

j) directs the work of concluding contract and subcontract agreements for capital construction by organizations under their jurisdiction and ensures an increased role for these agreements;

k) works out and approves departmental norms for the enterprises and organizations in the ministry's system, for producing and evaluating construction and installation work that is not specified by the Uniform Standards for Production and Evaluations according to the established procedure;

l) organizes training and improvements in the qualifications of specialists in special mid-level and other educational institutions in the ministry's system, trains qualified laborers and construction workers on the job and in the educational network in the ministry's system, ensures that the necessary conditions are created for the successful operation of technical and vocational educational institutions;

m) confers honorary titles on the leading laborers, engineering, technical and office workers according to the established procedure, awards workers with chest medals and uses other kinds of bonuses.

6. The Ministry of Construction in the Far East and Zabaykal' Rayons is headed by a minister that is appointed by the USSR Supreme Soviet in accordance with the USSR Constitution and during the period between sessions by the Presidium of the USSR Supreme Soviet with subsequent presentation for approval by the USSR Supreme Soviet.

The Minister of Construction in the Far East and Zabaykal' Rayons has deputies that are appointed by the USSR Council of Ministers. The minister distributes the responsibilities among the deputy ministers.

7. A board, consisting of the minister (chairman), the deputy ministers according to their post and also others who supervise workers in the ministry, is formed in the Ministry of Construction in the Far East and Zabaykal' Rayons.

The members of the ministry board are approved by the USSR Council of Ministers.

8. The Minister of Construction in the Far East and Zabaykal' Rayons bears personal responsibility for completing the tasks that are entrusted to the Ministry and the functions that it carries out, establishes the degree of responsibility of the deputy ministers and administrators in the departmental structure of the ministry for directing the individual spheres of the ministry's activity and also for the work of the enterprises, institutions and organizations in the ministry's system.

9. The Ministry of Construction in the Far East and Zabaykal' Rayons, within the limits of its capabilities, issues orders and instructions and gives directions on the basis of and in fulfilling the laws of the USSR, other resolutions of the USSR Supreme Soviet and its Presidium and the decrees and edicts of the USSR Council of Ministers that enterprises, institutions and organizations in the ministry are obligated to execute and organizes and checks their execution.

The ministry issues joint orders and instructions with other USSR ministries and departments in instances where they are required.

10. At the meetings that are regularly conducted the board of the Ministry of Construction in the Far East and Zabaykal' Rayons reviews basic problems of developing construction production, a production base for construction organizations and other questions involving the ministry's activities, discusses problems related to the practical management of enterprises, institutions and organizations, control over performance, selection and use of personnel, drafts of important orders and instructions, hears the reports of administrators in the structural subdivisions of the ministry, and the enterprises, institutions and organizations in the ministry's system.

The resolutions of the board are implemented, as a rule, by orders of the minister. In the event of disagreements between the minister and the board the minister implements his resolution while reporting to the USSR Council of Ministers about the disagreements that have arisen and the members of the board in turn can inform the USSR Council of Ministers of their opinion.

11. For reviewing proposals about the fundamental problems of industrializing construction, improving the organization and technology of construction and installation work and about other technical and economic problems, for working out recommendations about utilizing and adopting the latest achievements of native and foreign science, technology and advanced expertise, a scientific and technical soviet is formed in the Ministry of Construction in the Far East and Zabaykal' Rayons consisting of prominent scientists, highly qualified specialists, production innovators and also representatives of scientific and technical societies and other organizations.

The composition of the scientific and technical soviet and the statute concerning it is approved by the minister.

12. The structure and number of workers in the central organization of the Ministry of Construction in the Far East and Zabaykal' Rayons is approved by the USSR Council of Ministers.

The list of the staff in the ministry's central organization and also the statute concerning its structural subdivisions are approved by the Minister of Construction in the Far East and Zabaykal' Rayons.

The structural subdivisions in the ministry can be transferred to cost accounting by the Minister of Construction in the Far East and Zabaykal' Rayons.

The Ministry of Construction in the Far East and Zabaykal' Rayons has a stamp with an imprint of the USSR State Emblem and with its name.

CONSTRUCTION

LENINGRAD GORKOM PLENUM DISCUSSES CONSTRUCTION INDUSTRY

Leningrad LENINGRADSKAYA PRAVDA in Russian 16 Jul 81 p 1

[Article by LenTASS: "Improve Efficiency and Quality of Construction"]

[Text] The plenum of the Leningrad CPSU gorkom took place yesterday in Smol'niy. It discussed the tasks of the municipal party organizations to improve the efficiency and quality of major construction in light of the requirements of the 26th CPSU Congress.

The first secretary of the Leningrad party gorkom, Yu. F. Solov'yev gave a report.

The 26th Congress of the Communist Party of the Soviet Union opened a new and important chapter in the manuscript of the major historical events of the 1980's and became the next landmark in the life of our party and people. The results of the party forum, the inspirational ideas and suggestions that resounded from its tribune, demonstrated once more very convincingly that our party has no higher goal than the good and happiness of the Soviet people, than a peaceful sky over our earth, over the entire planet, the speaker stressed.

The communists and toilers of the city on the Neva, like all Soviet people, wholly support the CPSU course, the grand program of construction developed by the congress, and wholeheartedly approve the activity of the CPSU Central Committee, its Politburo headed by the outstanding political and state leader, the true successor of the great Lenin, Comrade Leonid Il'ich Brezhnev.

As noted at the 26th CPSU Congress, one of the features of the imminent decade is an increase in the scales of capital investments needed for the successful functioning of the national economy and satisfaction of the growing demands of the Soviet people. The task of more efficient use of them follows from here.

In the last five-year plan, the number of facilities under construction at the same time diminished, and the volume of resources needed for each construction site rose considerably. A course for reconstruction and technical rearming of the available facilities is being persistently implemented.

During the last five-year plan, the main funds of Leningrad industry increased by more than 1.5-fold. The working conditions were significantly improved. The necessary objective prerequisites were created for completion of the transition to primarily intensive development, and improvement in the level of all economic activity.

As a result of the successively conducted party line for steady growth in the welfare of the people, each year the scope of realization of the social program expands. More kindergartens, schools, hospital and housing are built. Major new measures to improve the housing conditions of the Soviet people have been stipulated by the legislature adopted by the first session of the USSR Supreme Soviet since the 26th CPSU Congress.

These questions are the focus of attention in the Leningrad party organization. In the last 15 years, the housing fund of our city has practically doubled. In the 10th Five-Year Plan alone housing of a total area over 10 million square meters was erected. Over 700,000 residents improved their living conditions. A lot has been done to reinforce the material-technical base of public and professional-technical education. The rates of development have been accelerated in the sphere of public health. The length of the subway lines has been significantly increased. Tens of kilometers of new roads have been laid. Overpasses and bypasses have been built and the capacity of the telephone network has exceeded 1 million numbers.

The advances attained are the result of great organizational and political work conducted by the party, soviet, trade union and Komsomol organizations and economic leaders, the result of the selfless labor of the workers, scientists, engineering-technical workers, and clerical employees the speaker stated.

The greeting of Comrade Leonid Il'ich Brezhnev to the builders, installers, planners and operators who participated in the creation of the Kingiseppskiy production association "Fosforit" was a new inspirational stimulus for the work of all Leningraders.

The city toilers respond with specific actions to the concern and constant attention of the party. The high patriotic movement elicited by the decisions of the 26th CPSU Congress and intensification of the party effect on all aspects of activity of the labor collectives promoted the successful fulfillment of the 6-month plan of the first year of the new five-year plan. The above-plan realization of industrial products was 73 million rubles. The entire increase in production volumes came from the improved labor productivity. The leading construction organizations of the city coped with the set tasks.

All of this is good prerequisites for success in realizing the plan for complex economic and social development of Leningrad and the oblast for the 11th Five-Year Plan.

The program for further increase in the scientific and technical potential of the country's economy planned by the congress advances even more important tasks for the Leningrad builders. They follow from that indisputable fact that improvement in the people's welfare must be based on a strong foundation and on the balanced growth of all sectors of the national economy.

This five-year plan, as in the previous years, stipulates preservation of the high rates of industrial, housing and cultural-general construction. More attention will be concentrated on the development of a material and technical base for public health. The elimination of the available lags in complex construction of residential apartments in the microregions and improvement in construction quality require more persistence.

One of the main trends in the activity of the CPSU raykoms, party committees and office of construction organizations in accordance with the requirements of the 26th CPSU Congress must be guarantee of unconditional fulfillment of the set planning assignments and socialist commitments. It is precisely here that the main efforts of the party organizations and economic leaders should be concentrated. Their business qualities and ability to act under conditions of complicated conditions will be assessed by this criterion.

The report concentrated a lot of attention on questions of improving production in the sector based on modern equipment and technology. It was stressed that the work from the experience of Lenmetrostroy must be based on precisely thought-out long-term programs of scientific and technical progress whose results should be examined in addition to other most important indicators of activity of each construction organization.

It is the task of the party organizations to increase the responsibility of the economic leaders of the construction and planning organizations for introduction of the achievements of scientific and technical progress, for development of their initiative in solving the urgent problems of construction sites, and for persistent perfection of party supervision of this important direction.

There are considerable reserves for raising the efficiency of capital construction in perfecting the system of controlling the branch and the structure of the construction organizations. It is important to form closed cycle associations which fulfill the main volume of work by in-house forces.

The CPSU raykoms need to penetrate deeper into questions of improving the structure of the construction organizations, actively direct this work, while the department of construction of the Leningrad CPSU gorkom needs to establish constant control over it.

The speaker noted that the quality of construction, especially housing, requires significant improvement. This task is multifaceted, requiring the solution of a number of economic and organizational questions and improvement in the labor efficiency of all the categories of workers engaged both in the enterprises of the construction industry and construction-installation sites, as well as in the planning-design organizations, the speaker stressed.

There are still significant omissions in the activity of the planners, in particular, the largest institute in the city, LenNIIproyekt.

One of the reasons for the existing shortcomings is that the role and responsibility of the planning organizations for the final construction results have been minimized. The speaker said that apparently the final assessment of the developed project should be made from the results of starting up the facilities and plants, the periods of their construction, and the actual outlays of labor and material resources.

The decisions of the 26th CPSU Congress which are aimed at a further improvement in the efficiency and quality in the branch advance to the forefront guaranteed coordination and interaction of the clients, planners, builders, transporters and acquisition organizations.

The report cited examples where the standards for duration of construction of facilities in the association "Elektroapparat" and at a number of other industrial facilities in the city were considerably exaggerated at the fault of the client.

The advantages of concentrating the functions of a single client for the facilities of housing and cultural-general purpose in the hands of the main administration for major construction of the Lensovet ispolkom have not been realized to a full measure.

The key to solving the many problems of the sector is successive realization of the decree of the CPSU Central Committee and the USSR Council of Ministers on perfecting the economic mechanism. This first of all concerns the concentration of capital investments and facilities in the main directions, reduction in the periods for erection of buildings and structures, and decrease in the volumes of incomplete construction to the standard. It is necessary to introduce more actively two- and three-year planning of the reference program and nomenclature of structures in housing construction, and in industrial, for a longer period, and to provide for uniform start-up of facilities during the year.

Further involvement of the workers and clerical employees in production control has great economic and social importance. This is directly tied to the broad introduction of local cost accounting.

The vast program of construction must be reinforced by well-grounded measures to strengthen its supply systems based on the creation of enterprises that manufacture effective construction materials, parts and designs. However, the resources allocated for reconstruction and technical re-equipping of the construction industry often are not completely assimilated and the start-up of facilities is delayed from year to year. There are many shortcomings in the development and assimilation of newly started-up facilities in the organizations of the Glavleningradstroy, Glavleningradinzhstroy, and especially the Glavlenstroyaterialy. Questions of updating enterprises of construction materials must be constantly monitored by the CPSU raykoms, party committees and the office of trusts and administrations. The intensive growth of facilities of the construction organizations and development of their in-house base is an important condition for the successful fulfillment of the five-year plan tasks.

An effective lever used by the party to successively attain an increased level of supervision of the economy is its personnel policy. The main trend in work of the party committees and offices, as G. V. Romanov, member of the Politburo of the CPSU Central Committee, first secretary of the Leningrad party obkom recently stressed at the plenum of the CPSU obkom, continues to remain the further improvement in responsibility of the personnel for the entrusted business.

Many beneficial changes have taken place in recent years in the personnel composition of construction organizations. The professional-technical schools have become an important reserve for supplementing the working class. Over 20,000 young men and women are studying in the 43 professional-technical construction schools. During the 10th Five-Year Plan, over 40,000 skilled workers were trained. At the same time, more attention should be focused on keeping the workers at the construction sites, improving the organization and discipline. Here everything is important, both concern for creating the necessary conditions for occupational growth of the youth, and improvement in the organization of production and everyday conditions of the workers.

Instilling a zealous, prudent attitude towards the national property is a no less urgent question. There are still great losses of material resources in the construction organizations and at the enterprises of the construction industry, including metal, cement, window glass, electricity and fuel.

Further perfection in the organization of competition is given a large role in the struggle to increase efficiency and quality of capital construction. It is necessary to make more extensive use of the rich experience accumulated by the Lenin-graders in implementing the rapid erection of facilities based on the use of contracts for creative cooperation with the planners, clients, and equipment suppliers, and the adoption of counterplans.

The speaker further dwelt in detail on questions associated with increased influence of the party organizations in the branch on all aspects of life of the labor collectives. In recent years, the party organizations of many trusts and administrations have accumulated significant experience in ideological and political-educational work. The system of party education, Komsomol political education, economic studies and tutorship has been further developed. But we do not have any grounds for complacency.

Questions of instilling consciousness and responsibility must occupy a proper place in the plans for complex development of the regions and labor collectives. It is necessary for the organizational and educational activity of the CPSU raykoms, party organizations, means of mass information and the ideological active members to be aimed at realizing the economic and social policy of the party, the unconditional fulfillment of assignments of the first year of the 11th Five-Year Plan.

The discussions were opened with the speech of the first secretary of the Petrodvorets CPSU raykom A. N. Alfimov. He related how construction is done in the rayon and how the CPSU raykom achieves an increase in quality and reduction in the periods of construction work, perfection in the economic mechanism and introduction of scientific and technical progress. The speaker noted that the success of the matter is decided by improvement in the efficiency of each primary, shop party organization, party group and the leading role of the communists.

V. B. Shalugin, mechanic of the association for production of construction of materials, designs and parts "Pobeda" of Glavlenstroymaterialy, Hero of Socialist Labor, stated how the improvement in the rhythm of work of the construction conveyor is affected by the creation of start-to-finish complex brigades and what a great effect was yielded by the joint contracts between the association and the automobile enterprises and main clients. The speaker also dwelt on questions of improving the quality of materials and items, the introduction for this purpose of advanced equipment and new technological processes.

The floor was given to the head of Glavleningradstroy, Yu. R. Kozhukhovskiy. He stressed that the 11th Five-Year Plan will be a serious test for the builders. It remains to implement construction-installation work for another almost 3 million rubles and to erect buildings for 250,000 apartments, 40 schools and hundreds of other facilities. There is essentially only one reserve for this: organize the work better and make more complete use of the available potentialities. Now each association and trust has developed specific measures to improve the intensification of production, the quality of work, to guarantee the rates of growth in the volumes of construction-installation work stipulated by the five-year plan.

The ideological support for activity of the construction conveyer was discussed at the plenum by the first secretary of the Frunze CPSU raykom A. Ya. Avdeyev. The primary party organizations were oriented on intensifying work with the leading personnel, and increasing their personal responsibility for the adopted decisions. The ideological-political and organizational activity actively uses the help of scientists, councils of economic and social development, a system of party and economic studies, and a unified political day. The tasks of perfecting planning and organization of labor are widely explained.

The brigade foreman of the complex brigade from trust No 16 of the Glavleningradstroy, Hero of Socialist Labor V. P. Krevin stated that engineering-economic training at the facility should be conducted with high responsibility for successful introduction of the brigade contract at the construction site and improvement in its results.

The next speaker was the deputy chairman of the Lensovet ispolkom Yu. A. Shibayev. In implementing the instructions of the party obkoms and gorkoms, the Lensovet ispolkom aims the builders at guaranteeing timely start-up of the main funds and facilities, concentration of capital investments and materials resources on the most important facilities, reduction in the periods of their construction and uniform start-up. The ispolkom has developed measures to improve the activity of the economic mechanism of the branch, to perfect planning and control of production organization, and to improve the work with personnel.

Electric arc welder of trust No 19 Glavleningradstroy, L. I. Omelenchuk spoke of the need to disseminate more widely the positive experience of the creative cooperation of the professional-technical school and the base construction organizations in training shift workers.

The head of the Glavlentavtotrans, A. A. Chistyakov dedicated his speech to further improvement in the coordination and harmony of work of the construction and transportation organizations. A target program has been developed for the 11th Five-Year Plan to improve the technical readiness and output of mobile stock for the line. It provides for more effective use of the production base and perfection in control of production.

The assistant editor of the newspaper LENINGRADSKAYA PRAVDA A. I. Lugovotsova discussed how the media of mass information and propaganda are developing the theme of improving efficiency and the quality of construction work.

The participants in the plenum asserted that communists, all workers of Leningrad, by adopting the decisions of the 26th CPSU Congress and the instructions of Comrade L. I. Brezhnev for steady supervision, will make a weighty contribution to strengthening the economic and defense might of the motherland.

Yu. F. Solov'yev gave the closing speech at the plenum.

The appropriate decree was adopted on the discussed question.

The plenum approved the long-range plan of work of the Leningrad CPSU gorkom for 1981-1983. The secretary of the Leningrad party gorkom, V. Ya. Kheddyrev gave a report.

G. V. Romanov, member of the Politburo of the CPSU Central Committee and first secretary of the Leningrad party obkom, and members of the office of the Leningrad CPSU obkom participated in the work of the plenum. S. L. Serokurov, instructor of the department of organizational-party work of the CPSU Central Committee participated in the work of the plenum.

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CONSTRUCTION

CONSTRUCTION CIRCULATING CAPITAL TURNOVER FOR MATERIALS RESERVES

Moscow FINANSY SSSR in Russian No 6, Jun 81 (signed to press 14 May 81) pp 20-26

[Article by R. K. Belkina and Ye. V. Kondrashina: "Turnover of Circulating Capital in Construction Industry Production Reserves"]

[Text] As of late 1979, the circulating capital of construction industry (contractor construction organizations) had reached 78.7 billion rubles and was 19.6 percent of all circulating capital in the national economy, including 53.4 billion rubles in commodity and material value reserves, or 17.8 percent of the total circulating capital in these reserves.

As compared with the final year of the Eighth Five-Year Plan, contractor organization circulating capital had increased 4.1-fold and means in commodity and material value reserves had increased five-fold, considerably exceeding the growth in total circulating capital in the national economy, which increased 90 percent during that same period; the increase in industry was 68 percent, respectively. This resulted first of all from an increase in the volume of unfinished construction-installation production on the books of contractor organizations.

In 1970, unfinished production was 2.9 billion rubles. In 1979, it was 38.5 billion, and its proportion in the total circulating capital of contractor organizations increased from 26.8 to 72.1 percent during that period. The main reason was the switch to calculations for finished projects and major work stages; in 1971, these calculations comprised 50.4 percent of all work paid for, but in 1978 -- 97.5 percent.

But even without unfinished production, the circulating capital of contractor organizations increased more during this period than in industry or in the national economy as a whole. Circulating capital in commodity and material value reserves (excluding unfinished construction-installation production) had increased 92 percent by the end of 1979 as against 1970. At the very same time, the increase by 69.3 percent for industry and 83.5 percent for the national economy as a whole.

As is known, the exact same turnover indicators are used to evaluate the effectiveness of circulating capital use in contractor organizations as are used for industrial enterprises. That is, the time within which circulating capital advanced by cost-accounting organizations in monetary form again takes on monetary form, after accomplishing a number of sequential operations in the sphere of production and circulation. It is also the number of circulations within a year and their load factor, that is, the amount of circulating capital fixed in circulation per ruble of construction-installation work done using one's own efforts.

However, the existing methods of determining capital turnover for contractor organizations differ somewhat from the methods of determining it in industry, which are based on the turnover volume and composition of average carry-overs used to calculate circulating capital. Whereas the amount of basic and auxiliary output sold in wholesale enterprise prices is used as the turnover volume in industry, in construction organizations, it is the amount of work done in estimated prices, with consideration of compensations and benefits paid above these prices, as well as receipts from the sale of subsidiary enterprise materials and output not detailed in the industrial balance. Thus, gross volume of work done is used in construction, instead of amount of output sold. But these indicators are evaluated nearly identically, since the estimated cost of work in construction corresponds roughly to wholesale prices in industry.

When calculating turnover, unfinished construction-installation work is excluded from the circulating capital used to set rates, as distinct from the procedure in effect in industry. These are differences resulting from the features of construction production and calculations with clients for contractor organization output and are, we think, fully justified.

Individual economists propose determining turnover volume not in terms of work done, but in terms of work released for operation, not in terms of estimated cost, but in terms of actual net cost. They also propose calculating contractor organization circulating capital turnover with consideration of the turnover of unfinished construction and installation. We obviously do not agree with these proposals. Circulating capital turnover is defined as the relationship of the estimated cost of construction and installation done by one's own efforts to total circulating capital available to contractor organizations to perform that work.

In the period when calculations for finished projects and work stages were used little (prior to the 1970's), there was no large gap between the volumes of work done and work released. This permitted determining turnover volume on the basis of total work released when calculating turnover. However, as such calculations came into widespread use and the units used in them were consolidated, the volume released deviated increasingly from the volume of work done in a given year (for which the circulating capital had been allocated) and increasingly reflected work volumes of preceding years. It became impossible in practice to single out circulating capital which had ensured the volume of work released, rather than work done.

As we changed over to calculations for finished enterprises, start-up complexes and facilities ready to release output or render services, the unfinished production of construction-installation work increasingly approximated unfinished construction in terms of amount and content. For contractor organizations credited on a "turnkey" basis, whose unfinished production reflects the cost of equipment released for installation as well, unfinished construction-installation and unfinished construction coincide fully. Here, the turnover of capital in unfinished production fully approximates capital investment turnover. In this connection, since 1972, when determining circulating capital turnover for contractor organizations, circulating capital employed in unfinished construction-installation production has been excluded. Its turnover is an independent and very serious problem which is the subject of separate study and is not examined in this article.

It is also inappropriate to evaluate turnover in terms of actual net cost, in our view. That would improve the turnover indicators of those organizations which exceed estimated costs, which permit losses and thus increase circulation. Calculating

turnover in this way would be directly contradictory to the actual state of things. In organizations operating at a loss, in which net cost actually exceeds estimated cost as a calculations base, capital entering circulation does not recompense advanced circulating capital expenditures.

Evaluating circulation in estimated prices has one other advantage: in so doing, the turnover calculation is linked to the basic indicators of plan fulfillment (gross and commodity output volume, labor productivity and others). It should also be borne in mind that, in planning the need for circulating capital advances -- own circulating capital normative and credit -- we are also governed not by net cost, but by the estimated cost of the work volume being planned. The work done is paid for and circulating capital expenditures are consequently recompensed on the basis of estimated prices, with additional payments of compensations and benefits not considered in them.

The "Basic Directions of USSR National Economic Development in 1976-1980" anticipated accelerating circulating capital turnover in the national economy by 3-5 days. USSR ministries and departments and union republic councils of ministers, in accordance with the assignments approved for them on involving material resources in economic circulation by accelerating circulating capital turnover and reducing above-normative stocks of materials, worked out and approved such assignments for all subordinate subdivisions.

A study of contractor organization circulating capital dynamics in 1970-1978 showed that normed circulating capital in commodity-material value reserves (excluding the unfinished production of construction-installation work) increased perceptibly for the branch as a whole and for seven Union construction ministries (USSR Ministry of Construction, USSR Ministry of Industrial Construction, USSR Ministry of Construction of Heavy Industry Enterprises, Ministry of Transport Construction, Ministry of Construction of Petroleum and Gas Industry Enterprises, USSR Ministry of Electrification and Power Engineering and USSR Ministry of Installation and Special Construction) in the 10th Five-Year Plan. In the first years of the five-year plan, their annual increment exceeded 10 percent for the branch as a whole. Above-plan commodity-material value (above-normative uncredited and surplus) reserves increased especially. At the same time that above-plan reserves either decreased or remained practically unchanged for a majority of the construction ministries in the Ninth Five-Year Plan, beginning in the first year of the 10th Five-Year Plan, they increased each year, exceeding 14-fold those present as of 1 January 1975 by 1 January 1980 for the seven construction ministries analyzed.¹ This applied most of all to the Ministry of Construction for Petroleum and Gas Industry Enterprises (53.5 percent of the normative), Ministry of Transport Construction (17.4 percent) and USSR Ministry of Construction of Heavy Industry enterprises (20.9 percent).

There was much surplus and long-unused material in the commodity-material value reserves of these seven ministries. Total above-plan commodity-material value reserves were 522.4 million rubles as of 1 January 1980. Eliminating these reserves is an important way of accelerating normative contractor organization circulating capital turnover.

1. All the data and calculations given in the article for Union-republic ministries relate to the Union portion of those ministries.

The growth in above-plan commodity-material value reserves is to be explained by serious shortcomings in the material-technical supply system of the construction organizations: failure to coordinate deliveries of materials, and especially of components and parts, with the schedules for construction-installation work, imprecise determination of the need for materials, failure to link delivery amounts with circulating capital normatives for forming reserves. Cases of premature delivery of materials ahead of construction-installation work schedules, of deliveries in less than full sets, have been noted in many surveys of organizations of the USSR Ministry of Industrial Construction and USSR Ministry of Construction. For example, given fulfillment of the 1978 plan for delivering reinforced concrete items by "Ryazan'stroy-4" trust, a considerable portion of such items, 2,307 m³, was not delivered; along with this, 600 m³ above the plan was delivered and could not be used that year. In trust No 36 of the Glavzapstroy, reinforced concrete items reserves, which exceeded the established norms, in physical terms, more than two-fold at the start of 1979, included 45 percent which were less than full sets. In the "Grazhdanstroy" trust in Kishinev, actual prefabricated reinforced concrete reserves exceeded the norms by an average of more than 20 percent in 1978. The entire above-normative reserve consisted of incomplete sets supplied by the No 4 reinforced concrete products plant.

The primary direction in which shortcomings in material-technical supply are being overcome is the continued development of production-technological sets, the change-over to planning and recording directly in terms of the consolidated construction brigade, as well as the comprehensive supplying of materials through territorial material-technical supply agencies on the basis of organization orders in accord with their requirements. The latter must be determined on the basis of designs and estimates, and not on the basis of extremely average norms per million rubles of construction-installation work, as is done now. The USSR Gosstnab is faced with completing its change-over to this form of supply for all projects in the state capital construction plan in 1981.

Today, this form of supply is used very rarely, but where it is used, it has helped reduce above-normative reserves of materials and accelerate normed circulating capital turnover somewhat.

Shortcomings in setting circulating capital rates also facilitate the formation of significant above-normative noncredited commodity-material value reserves. There are practically no economically substantiated normatives taking into account all factors of production and supply and calculated in accordance with the existing instructions, approved in 1966, for setting circulating capital rates for the contractor organizations and construction organizations of all the construction ministries analyzed. Incidentally, the above-mentioned instruction is itself in need of reworking and refinement in a number of its provisions.

In practice, only an experimental statistical method is being used to set rates for circulating capital in production reserves. When calculating their own circulating capital needs for each planning period, they proceed from the normative which actually evolved during the preceding period and the planned rate of growth in volume of construction-installation work to be done by their own efforts, corrected for the assignment on accelerating circulating capital turnover.

As a rule, for a majority of the ministries and main administrations, rate-setting for circulating capital reduces to distributing the normative established for them

among their organizations, without any calculations or substantiation. The distribution often does not correspond to the actual demand for circulating capital in individual organizations. Therefore, the normative is not filled for a number of organizations, and funds are insufficient for others. An analysis of the 1977 and 1978 annual reports of 80 construction organizations bears out that, as of the start of 1978 and 1979, forty organizations had above-normative, noncredited commodity-material value reserves and that the 40 others did not fill the circulating capital normative for those items.

Surveys have shown many instances in which completely unsubstantiated circulating capital norms have been set for commodity-material value reserves. For example, the 1978 normative for the USSR Ministry of Construction's KPD-2 trust in Primorskiy Kray was lowered by 1.8-fold as against the 1975 normative, given a 1.2-fold increase in planned work volume during that period. The 1978 normative for component and part circulating capital reserves for the USSR Ministry of Construction's trust No 36 in the Glavzapstroy was not set at all, although actual reserves of reinforced concrete items alone for this trust were very high and consistently exceeded the reserve norms in physical terms.

One major shortcoming is the fact that the reserves norms were never linked to the norms by which material-technical supply agencies are governed in utilizing funds for materials and monitoring the level of reserves in physical terms. And it turns out that financial indicators (balance data) in individual construction organizations, and even in some ministries, do not reflect the inflation of the reserves normative, while physical indicators contain considerable above-normative reserves of basic types of materials.

It seems appropriate to us to work out and approve economically substantiated circulating capital norms for all construction ministries, as was anticipated by decree No 695 for the industrial ministries. Studies have permitted the assumption that this would not lead to overall growth in the norms, but would help us distribute them more correctly among organizations.

In this regard, it must be borne in mind that even properly determined circulating capital norms will be effective only if construction-installation work plans are fully balanced with material supply and with the capacities of contractor organizations and only if the above-mentioned shortcomings in organizing material-technical supply and performing the work are eliminated.

A factor analysis of reasons for growth in circulating capital in production reserves (excluding unfinished construction-installation work) in 1977 and 1978 showed that this increment resulted from an increase of less than 50 percent in the volume of construction-installation work for a majority of the ministries.

It is evident from a comparison of the rates of growth in circulating capital in reserves of commodity-material values with the rates of growth in amount of work done by own efforts in 1970-1979 that the growth in work volume for the branch as a whole outstripped the increase in reserves in the Ninth Five-Year Plan and that circulating capital grew faster than work volume both for the branch as a whole and for the main construction ministries beginning in 1976. In 1978, the gap between their rates of growth reached 26.7 percent, and in 1979 -- 30.8 percent.

Dynamics of Normed Circulating Capital Turnover in Contractor Organizations (in days)

	1972	1974	1975	1976	1977	1978	1979
A	1	2	3	4	5	6	7
branch as a whole	55.7	54.0	53.3	61.4	60.5	64.4	67.3
by individual ministry							
construction	50.0	50.6	50.9	55.5	58.0	62.6	66.3
industrial construction	52.7	46.6	49.4	51.2	56.5	65.8	77.1
construction of heavy industry enterprises	45.0	47.7	48.3	50.3	52.5	55.6	57.4
transport construction	62.1	59.1	58.3	61.6	65.0	66.1	68.6
installation and special construction	36.8	36.7	36.9	45.8	47.8	49.6	51.6
construction for petroleum and gas industry enterprises	97.2	77.2	78.5	87.9	96.1	107.2	110.3
electrification and power engineering	67.2	64.3	60.8	61.3	66.6	70.2	72.3

Inasmuch as the turnover of circulating capital depends not only on the size of the reserves, but also on the work volume done given that amount, reduced circulating capital use effectiveness -- retarded turnover -- has been a direct result of the outstripping rate of growth of circulating capital in production reserves. For the branch as a whole, normed circulating capital turnover in 1979 was 67.3 days, as against 55.7 in 1972 and 53.3 in 1975. In 1972, this capital circulated 6.5 times, in 1975 -- 6.8 times, but in 1979 -- only 5.3 times.

The retardation of normed circulating capital turnover led to ministries' failing to meet approved assignments for involving material resources in economic circulation. Instead, additional circulating capital was drawn into production reserves, the total for the branch exceeding the assignment for freeing it and drawing it into circulation three-fold in 1977 and 1.6-fold in 1978.

Along with shortcomings in material-technical supply and growth in above-normative noncredited commodity-material value reserves, the retardation of normed circulating capital turnover is also to be explained by the significant underfulfillment of plans for construction-installation work done by one's own efforts by the branch as a whole and by many construction ministries since 1976. This has delayed growth in work volume and has naturally led to its lagging behind growth in reserves.

While the construction-installation work plan was carried out for the branch as a whole in the Ninth Five-Year Plan, the work volume was not carried out by 2.5 percent in 1976, by 4.3 percent in 1977, by 2.8 percent in 1978 and by 4.6 percent in 1979. Each year since 1974, the construction-installation work plan has not been met by 5-8 percent by the USSR Ministry of Construction and USSR Ministry of Industrial Construction (Union portions). In 1978, only the USSR Ministry of Installation and Special Construction and Ministry of Transport Construction, among the seven construction ministries analyzed, coped with the work plan, and in 1979, only the USSR Ministry of Installation and Special Construction.

In this connection, the basic measures of acceleration of normed circulating capital turnover are: higher technical level of construction production organization and

labor productivity, which ensure fulfillment of construction-installation work plans; improvement in plan quality, ensuring fully balanced plans, the concentrating of efforts and funds on start-up projects, and so forth; eliminating above-normative non-credited and surplus commodity-material value reserves; lower materials-intensiveness of construction work; eliminating shortcomings in material-technical supply in construction.

The correctness of contractor organization circulating capital turnover planning is of important significance, especially for normed capital.

As is known, the assignment on accelerating normed circulating capital turnover is set in the course of approving planned carry-overs in the form of an assignment on drawing commodity-material values into economic circulation, by year of the five-year plan.

The assignment on accelerating normed circulating capital turnover must be taken into account when determining the plan indicator for it, which is reflected in the report on p 450, column 2, of balance appendix No 1. Finally, the assignment on accelerating own circulating capital turnover is set in a specific amount of the normative for the planning period during the course of USSR and Union republic ministry of finance reviews of ministry and department revenues and expenditures balances.

A comparison of the size of assignments on accelerating normed circulating capital turnover and involving material resources reflected in the above-cited planning stages in economic circulation in 1978 shows that there is an insufficiently substantiated bond between them. For example, the USSR Ministry of Construction and Ministry of Transport Construction assignment stemming from the planned turnover indicator comprises about half the total assignment on drawing material resources into economic circulation; it exceeded the overall assignment four-fold for the USSR Ministry of Installation and Special Construction and more than seven-fold for the USSR Ministry of Electrification and Power Engineering. For the Ministry of Construction of Petroleum and Gas Industry Enterprises, given a total assignment of 27 million rubles for drawing material resources into economic circulation, the planned turnover indicator anticipated retardation of that turnover and drawing an additional 155 million rubles into circulation.

At the same time, the planned turnover indicator must, in our opinion, be determined in accordance with the assignment for accelerating turnover and involving material resources in economic circulation, since the initial data for determining both are identical. In calculating both, the circulation volume is determined on the basis of the estimated cost of construction-installation work, with consideration of the compensation paid over and above that cost and receipts from the sale of materials and output from subsidiary production which were not delineated in the industrial balance. In both instances, planned carry-over commodity-material values must take into account those portions generated both through own circulating capital and through bank credit.

The serious oversights in determining planned carry-overs and the planned normed contractor organization circulating capital turnover indicator are to be explained first of all by the absence of centralized instructions on procedures for determining it, as well as by the fact that this indicator, like the analysis of its fulfillment, has not occupied a proper place in evaluating the financial activity of construction organizations, ministries and departments. Existing instructions, although

they do anticipate its inclusion, beginning in 1978, in the annual reports of contractor organizations, do not contain instructions on procedures for calculating it.

Available instructions on calculating planned carry-over normed contractor organization circulating capital are based on the presence of an approved assignment on accelerating turnover and involving material resources in economic circulation in the ministries and departments, but they do not indicate how this assignment is to be calculated.

An analysis of the reports of ministries, individual trusts and house-building combines for 1978 shows that, because of the lack of instructions, there was no uniformity in calculating planned turnover for either the ministries or their subdivisions. This indicator was not presented at all in the summary reports of the Union portions of the USSR Ministry of Industrial Construction and USSR Ministry of Construction of Heavy Industry Enterprises.

In reviewing the 1977 and 1978 assignments established for the ministries analyzed on drawing material resources into economic circulation, we became convinced that they are insufficiently linked to the presence of above-plan (above-normative noncredited and surplus) material values in these ministries. In both 1977 and 1978, the assignment on drawing material resources into circulation for the Union portions of the USSR Ministry of Installation and Special Construction, Ministry of Transport Construction and Ministry of Construction of Petroleum and Gas Industry Enterprises was below the total above-normative noncredited reserves as of the start of the year.

When determining assignments on drawing resources into circulation, and consequently when determining normed circulating capital turnover plan indicators, consideration is not given to the planned savings from lowering material expenditures. At the same time, as has already been noted, eliminating above-plan reserves and lowering material expenditures in construction production are important reserves for accelerating the turnover of contractor organization normed circulating capital.

Some work has been done in the ministries and their subdivisions on resolving the task set by the "Basic Directions of National Economic Development in 1976-1980" of ensuring a savings of 5-7 percent in rolled metal products in construction during the five-year plan, 5-6 percent in cement and 12-14 percent in lumber.

The USSR Gosplan has approved assignments on saving these materials for the ministries annually. The ministries, in turn, have approved materials economy plans, broadening the list of such materials to a certain extent.

Reducing the materials-intensiveness of construction-installation work in which the proportion of expenditures on materials exceeds 50 percent must be of considerable help in reducing stocks of materials. The planned economy of such expenditures must therefore be taken into account when determining planned reserves and assignments on accelerating turnover.

In determining planned carry-over of normed contractor organization circulating capital, the planned indicator for their turnover and assignments on drawing material resources into economic circulation, we need to bear in mind the use of reserves for accelerating turnover: reducing above-normative noncredited and surplus commodity-material value reserves in every way possible and reducing the materials-intensiveness of

construction production through economizing on materials (eliminating overexpenditures of materials, improving norms, use of more economical substitutes, and so on).

In calculating planned carry-over normed circulating capital, we must take into account above-normative noncredited and surplus commodity-material values. To do this, the planned reserve of such values in the base year should be adopted as the starting data.

It is inexpedient to determine the amount of reduction in reserves through the elimination of above-plan reserves by subtracting them from actual carry-overs of the base year. If this method is used, planned reserves in organizations with an unfilled normative would equal actual reserves, but the latter would at the same time be less than even the minimum necessary (normative) and would knowingly be inadequate to carry out the production program.

The planned reserve would then have to be adjusted to conform to changes in the work program and the planned reduction in the materials-intensiveness of construction output.

The following formula can be used to determine planned carry-overs:

$$3_{\text{п.н.}} = 3_{\text{н.б.}} \times I_{\text{смп}} \times l,$$

where $3_{\text{п.н.}}$ are planned carry-overs of normed circulating capital in commodity-material value reserves (excluding unfinished construction-installation);
 $3_{\text{н.б.}}$ is the planned reserve in the base year;
 $I_{\text{смп}}$ is the planned rate of growth in the construction-installation work program;
 l is a reduction factor for carry-over normed circulating capital in commodity-material value reserves based on economizing on materials expenditures.

This reduction through economy factor is determined using formula:

$$l = \frac{M_{\text{п.н.}} - 3}{M_{\text{п.н.}}},$$

where $M_{\text{п.н.}}$ are materials expenditures on construction-installation, according to the plan;

3 is the planned savings due to reduced expenditures on materials.

The indicator of normed circulating capital turnover for the planning year ($O6_{\text{п.н.}}$) can be determined by multiplying planned carry-overs ($3_{\text{п.н.}}$) by 360 days and dividing the product by the planned turnover volume ($O_{\text{кв.п.н.}}$):

$$O6_{\text{п.н.}} = \frac{3_{\text{п.н.}} \times 360}{O_{\text{кв.п.н.}}}$$

The planned turnover volume is calculated by multiplying the base turnover volume (based on estimated cost of construction-installation work, with consideration of compensations received above the estimated cost and receipts from sales of subsidiary production materials and output not delineated in the industrial balance) ($O_{\text{кв.б.}}$) by the planned rate of growth in construction-installation work done by one's own efforts ($I_{\text{смп}}$):

$$O_{\text{кв.п.н.}} = O_{\text{кв.б.}} \times I_{\text{смп}}$$

The assignment on drawing material resources into economic circulation, in connection with the planned assignment for accelerating normed circulating capital turnover, is determined by multiplying the difference between the planned turnover, in days, and the turnover in days of the base year by the planned circulation and dividing that product by 360 days:

$$B_{\text{всех pec}} = \frac{(O\delta_{\text{пл}} - O\delta_{\text{б}}) \times O_{\text{кн пл}}}{360}.$$

In order to increase responsibility for the efficient use of circulating capital, we consider it appropriate to include the plan indicator of normed circulating capital turnover among the indicators of the construction financial plan. Meeting assignments for accelerating circulating capital turnover and drawing material resources into economic circulation must be considered among indicators for evaluating the results of construction organization economic-financial activity and must be included in the list of terms for competition among them and conditions for awarding bonuses from material incentives funds to workers in material-technical supply departments (offices) and finance departments.

Current practice in setting assignments on accelerating own circulating capital turnover, with annual calculations of the demand for it when reviewing revenue and expenditure balances (financial plans), does not, we think, take into account all reserves for accelerating that turnover. In order to encompass these reserves more fully, the assignment on accelerating own circulating capital turnover should obviously be calculated based on the assignment established by the ministry for drawing material resources into economic circulation.

If, when determining this assignment, we proceed from all commodity-material value reserves (both own circulating capital reserves and credited reserves), we can introduce an adjustment factor signifying their participation (share) in shaping reserves in order to find out what portion to relate to accelerating the turnover of own circulating capital.

This coefficient can be calculated from the relationship which developed in the base year between the normative of own circulating capital to form reserves and the planned reserve. The latter is defined as the sum of the circulating capital normative, actual indebtedness for loans for commodity-material values, and indebtedness to suppliers as used in crediting. The coefficient is calculated using the formula

$$k = \frac{H_0}{H_0 + K_0}.$$

where H_0 is the circulating capital normative in the base year (excluding unfinished construction-installation work);

K_0 is the total commodity-material values credited and counted towards credit.

But to determine the assignment on accelerating the turnover of and drawing own circulating capital into circulation which must be taken into account when calculating demand in the normative for the planning period, we use the formula:

$$B_{\text{соб соб}} = B_{\text{всех pec}} \times k,$$

where $B_{\text{соб соб}}$ is the assignment on drawing own circulating capital into economic circulation;

$B_{\text{всех pec}}$ is the assignment on drawing all normed circulating capital into economic circulation.

Putting planning assignments for accelerating normed circulating capital turnover into proper order and the availability of realistic plans which take all reserves into account will doubtless become an important factor in accelerating turnover and, as a consequence, the more efficient use of circulating capital, along with putting the organization of construction-installation work and material-technical supply into proper order. Moreover, realistic plans for accelerating the turnover of normed circulating capital and the assignment for drawing material resources into economic circulation create a reliable basis for setting up monitoring of their execution by superior organizations and finance agencies.

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CONSTRUCTION

BANKS URGED TO USE CONSTRUCTION CONTRACTOR ORGANIZATION CREDIT LEVERS BETTER

Moscow FINANSY SSSR in Russian No 6, Jun 81 (signed to press 14 May 81) pp 30-33

[Article by D. I. Zaychenko, manager of the USSR Stroybank's Ternopol'skaya Oblast Office, and A. N. Sharov: "Improving Interrelationships Between the Stroybank and Contractor Organizations"]

[Text] Increasing attention is being paid to improving the effectiveness of bank credit. The volume of credit investments made through the Ternopol' office of the USSR Stroybank increased by 20.4 percent in 1979 and 6.2 percent in 1980, to 117 million rubles. The amounts of short-term loans increased even faster this past five-year plan, as is evident from the table:

	1975	1976	1977	1978	1979	1980
short-term loans made	64.9	74.8	83.4	84.8	108.4	117.1
including:						
to construction projects	16.4	10.3	12.3	16.5	17.7	23.0
to contractor organizations	48.5	64.5	71.1	68.3	90.7	94.1
(in million rubles)						

Thus, the amount of short-term credit investments had increased by 80.4 percent in 1980 as compared with 1975.

In recent years, special accounts have been opened by eight clients for calculating commodity construction output, and the total funds reserved in them are six million rubles. Moreover, five general-contractor SMU's [construction-installation administrations] have opened special accounts, with reserved funds totalling 2.2 million rubles for calculating commodity output with 14 subcontractor organizations of the Ukrainian SSR Ministry of Installation and Special Construction Work and serving as a temporary source of credit for expenditures on unfinished construction-installation work.

Work has been done in 1981 on changing over to the new form of calculations for organizations of the Ukrainian SSR Ministry of Industrial Construction and a number of contractor organizations of nonconstruction ministries. But the role of bank credit cannot, in our view, be strengthened only by increasing the amount of it. We need a modification of the means and methods of bank investment activity. The economic appropriateness of building one project or another is determined not only by the proposed amount of profit, but foremost by the necessity of resolving the social and political tasks of our society at a given stage of its development.

It should also be recognized that neither credit nor bank interest is a factor influencing the choice of particular resolutions by economic organizations of questions of their production activity. However, that in no way signifies that the role of the economic levers of regulating economic processes on the part of the bank has lost its importance. The bank is an economic institution, and its special role is determined by its potential for using specific methods inherent only to it of influencing the activity of the organizations it serves. The fact that these methods cannot be static or applicable in all situations is another matter.

In our opinion, modern methods of bank influence clearly suffer from one-sidedness and often bear a clearly expressed command character. Measures of encouragement are limited basically to lowering interest rates if a project is put into operation ahead of schedule and to the right to extend certain types of loans, given a certain range of satisfactory indicators. Punitive measures clearly prevail: higher interest rates, partial or full denial of credit, fines, recalculating total wages due, the demand that those guilty of write-ups be deprived of all bonuses for up to a year, and so on. They punish for failure to meet basic indicators (including the infamous "gross" volume of construction-installation work), failure to meet start-up schedules and wage fund overexpenditures, inadequate labor productivity growth, failure to make loan payments to the bank on schedule, and so on. As a result, as instructions to make sanctions harsher increase, the potential for credit influence in fact decreases.

One reason for this situation is that the bank bases its interrelationships with a given contractor organization on a range of indicators determined for a long period. At the same time, contractor organizations operate under constantly changing conditions: the building materials used change, as does the work structure, the skills of their labor resources, and so on.

In this situation, an automatic comparison with indicators previously achieved (or with indicators planned "from what has been achieved") can in no way provide an objective picture of the work of contractor organizations. The bank must structure its interrelationships with clients based on an optimum variant of client activity under actual conditions. And that assumes first of all a broadening of the rights of local bank institutions to make decisions on credit procedures and more thorough analysis of the work of the construction-installation organizations being served.

It is also necessary to anticipate situations in which bank institutions themselves, based on analyses they have made, must provide specific recommendations on improving the financial-economic activity of contractor organizations and translate them into a special credit procedure (right up to ceasing to issue any loans at all) which would go into effect only if these recommendations are not carried out. Such direct interference in the economic activity of contractor organizations can naturally be viewed as something to be done in exceptional cases.

We view disseminating analysis of the liquidity of economic organizations, to which little attention has thus far been paid, to be an important direction in improving analysis. If consideration is given to the fact that liquidity signifies the ability of an economic organization to meet its financial obligations, then the necessity of such analysis by the bank is clear. One indicator of liquidity would be a coefficient calculated as follows:

$$K = \frac{A}{L},$$

where A are current assets (money in organization accounts, client debts due, stocks of materials within the normative, and so on);
 L are current liabilities (supplier and subcontractor due and overdue debts, short-term bank loans, budget debts, wages owed workers, and so on).

Analyzing liquidity will, in addition to everything else, facilitate development of a differentiated approach, since liquidity coefficients can serve as an important indicator when determining credit procedures. The experience of our office shows that use of these coefficients (rules for calculating them still need some refinement) can be of great help in bank credit work. In particular, the most solvent organizations could, on their basis, be singled out as preferred clients to whom loans would be issued at the lowest interest rates ("first-level rates"). In this regard, the total interest on credit must be calculated in the annual financial plan (balance of revenues and expenditures) on the basis of the demand for credit resources and normal percentage rate agreed to by the bank. If an organization is given credit as a preferred client thanks to its stable financial situation, it generates a savings which must be directed either in full or in part into the material incentives fund (including that for awarding bonuses to economic services).

With a view towards strengthening the discount regulation of the capital construction economy, we also need to differentiate interest rates to a greater degree. In this connection, we propose their territorial and time differentiation. Territorial differentiation will take into account how important economic development of a given region is. Therefore, interest rates must be lower than the national average in such regions as, for example, the Nonchernozem Zone of the RSFSR or the BAM zone, where industrialization (including of agriculture) must be done as quickly as possible.

Time differentiation is called upon to facilitate smoothness in construction production. In view of the fact that projects are still being released for operation by and large at the end of the year, and within the year in the last months of the quarters, the bank needs to differentiate interest rates so that they are higher in the fourth quarter than for the year as a whole and higher in the last month of the quarter than for the quarter as a whole, and even so that they are higher in the last 10-day period of the month than for the month as a whole. Incidentally, the last of these differentiations should probably be used only at the end of the year, possibly at the end of the quarter as well.

Those dealing with capital construction know the real damage caused by unevenness and the "storming" closely associated with it. Time differentiation is called upon to act as a bank tool for regulating smoothness in carrying out the start-up program, which means construction production as a whole.

Introduction of a system of continuous credit renewal could help improve the differentiated approach to clients. The essence of this system is that a special credit limit (up to the above-plan profit, for example) could be established for a smoothly operating organization with above-plan profit. Loans issued within this limit without additional guarantees and security could be used at the client's discretion (to award bonuses, as part of forthcoming material incentives fund receipts, for major overhauls, wage supplements, and so on).

The granting of a loan of this type would stop after the entire limit had been used, but would be resumed automatically immediately after the entire debt (or portion of

it) had been paid off. And the period for which the credit would be used would be limited only by the condition that above-plan profit was available. Introduction of a "revolving" credit system would significantly increase the economic interest of contractor organizations in profitability.

We must not remain silent about several questions connected with credit for above-normative stocks of material values. Focus is drawn to the fact that monthly liquidation of indebtedness on loans for procuring building materials and components might, in an extreme case, be suitable for supply and marketing organizations, but it does not conform at all to the work specifics of construction-installation organizations. Inasmuch as funds invested in materials and components are returned in monetary form only after the client has paid for construction-installation work done, it would be more appropriate to change the procedure for paying off this type of loan somewhat. Contractor organization current account indebtedness must be cleared only if above-normative or surplus and unneeded stocks have been sold to outside organizations. And the remainder of the indebtedness must gradually be reformulated as indebtedness on loans for expenditures on unfinished construction-installation work and cleared using funds obtained from the client for completely ready projects and work stages. Such a procedure would reflect processes actually occurring in circulating capital circulation in construction.

Extending credit for above-normative material value reserves is intended to assist the more efficient consumption and saving of funds for their acquisition. However, the desired influence of credit is weakened in considerable measure by the possibility that overdue bank loans without commodity-material security will be used in economic circulation by contractor organizations.

This problem applies in equal measure to crediting expenditures on unfinished construction-installation work. If such loans are used, what is actually created is a situation in which an organization, after wastefully spending circulating capital used as a guarantee for obtaining a loan, is forced to direct bank funds no longer legally belonging to it into rebuilding funds spent, as for example on the acquisition of materials when expenditures on them have exceeded the norms, and so forth. In such situations, credit is transformed into direct bank investing, and the bank participates directly, through its credits, in financing the activity of the contractor organization.

The question arises as to whether comparing financial results achieved, and foremost total profit obtained, with planned indicators is justified. It seems to us that it would be economically more correct in this instance to calculate separately that portion of the profit obtained as a result of a contractor organization's having overdue, nonsecured bank loans (bank investments) in economic circulation and, when recalculating it, to record it not in plan fulfillment but directly in the budget. Such a procedure is intended not only to improve observance of calculation discipline in industry, but also to facilitate increasing capital investment effectiveness.

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1. We presented proposals on determining that portion of profit and procedures for recalculating it given profit plan nonfulfillment or operations at a loss, which go beyond the scope of this article, at a scientific conference "Economic Levers for Increasing the Effectiveness of Social Production and Improving Work and Output Quality" held at the Moscow Institute of Finance in December 1980.

I should also like to point out one other factor negatively influencing the development of credit relations. Strange as it may seem at first glance, I refer to the absence of bank institution economic interest in broadening and improving the extension of credit. Our press has already noted that "bank work with credits is not reflected in any plan indicators whatsoever and is consequently not encouraged in any way whatsoever. Industrial credit department workers receive bonuses of up to 25 percent, as do all other bank workers, for overfulfilling the cash-accounts plan, to which they are only remotely related."¹ This was stated with regard to the Gosbank system, but can be applied in full to Stroybank institutions as well; in fact, workers in the finance and credit departments of contractor organizations have just as remote a relationship to fulfillment of the own-funds contributions plans of client organizations designated for capital construction, although they, too, are awarded bonuses for carrying it out, along with other workers, instead of for work with credits.

However, the problem here seems to reduce to simply making one of the existing indicators of credit activity a mandatory indicator for awarding bonuses to bank workers, while in fact, not one of them could comprehensively characterize work with credits. For example, improving the indicator of clearing credits through the overdue loans account depends largely on the experience of credit workers and cannot always serve as an objective indicator of observance of calculation discipline. Moreover, orientation towards this indicator can lead to a situation in which the banks are not issuing loans, even at the most minimal risk of nonpayment, which has a negative impact on the economy of capital construction.

Neither is the indicator of credit turnover ideal: given significant subcontractor indebtedness, the indicator of turnover can grow, while the contractor organization can actually be using circulating capital not belonging to it in economic circulation for a long time.

At one time, special attention was paid to growth in the indicator characterizing the proportion of bank credit being channeled directly into material production. but the endless growth in this proportion, to the detriment of loans being issued to service economic circulation in the D-T and T-D stages was also recognized as not being a positive phenomenon.

At the same time, profit can serve as a synthetic indicator not only right in production, but also in bank activity. Use of this single indicator would naturally require a whole series of changes in the current rules in order to create a precise system in which the formation of profit in bank institutions would occur under certain conditions (called optimum or desirable). For example, in order to strengthen bank interest in reducing client overdue loan indebtedness, a sum calculated at reduced interest rates should be left in the form of payment for credit in a given institution. But the sum generated by the difference between that lower rate and the rate being used in interrelationships with insolvent clients, a higher rate, should be recalculated directly to a centralized fund, not recorded in fulfillment of the profit plan established for the given bank institution. That plan must be communicated based on the established credit limit. In this instance, the bank itself would be interested in the fullest possible use of all credit resources available to it. Overdue loans should probably also be recorded in the established limit account.

1. G. Gusakov, "Bank Or Miser King?," IZVESTIYA, 13 March 1980.

There are unquestionably numerous other concrete details requiring refinement concerning this question. In any case, the realities of today's economy face the banking system with new tasks whose resolution will depend on its flexibility and effectiveness. And it is the task of credit workers to take every step necessary to reach the goals stemming from contemporary party economic policy.

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CONSTRUCTION

DEFICIENCIES IN IRKUTSK CONSTRUCTION CITED

Moscow STROITEL'NAYA GAZETA in Russian 6 May 81 p 3

[Article by M. Ryabtsovskiy, chairman of the Irkutsk urban KNK [People's Control Committee]: "And How About Principles?"]

[Text] Work on the second phase of the Irkutsk sewerage system was already planned to be completed in 1975; however, even by January 1981 the amount of capital utilized comprised only 83 percent. The programs for putting sewerage installations and purifying structures into operation remained incomplete during the 10th Five-Year Plan as well.

Administrators from the Irkutsk Housing Construction Trust, the Irkutsk Industrial Construction Trust and the Irkutsk Special Construction Trust (N. Kozhevnikov, Yu. Korytov, A. Banevich) have acted carelessly concerning the construction of important installations, mostly because the municipal Sanitation and Epidemiology Administration (B. Parfenov) and the Baykal' Basin Administration have not been exacting. The gorispolkom's UKS [Capital Construction Administration] (P. Adamchuk) is also at fault in this matter. It did not hand out technical documentation and equipment on time and did not satisfactorily control the pace of construction.

Intervention by the urban KNK was also required at such a structure as the bridge over the Angara. This unique structure was already approved for use in 1978 with an evaluation of "excellent." Construction workers received about 400,000 rubles in bonuses and after that forgot about their guaranteed obligations. Serious imperfections have not been eliminated up to the present time.

The unprincipled position of the members of the acceptance commission (the chairman is Ye. Yegorov, director of GASK [State Architectural and Construction Control] Municipal Inspection) promotes the start up of structures with poor quality. Directors of the Main Eastern Siberia Construction Administration (Deputy Director for Construction in Irkutsk B. Bakharev) are not giving sufficient attention to municipal economy structures. In addition, preparations by engineering and technical workers in our construction organizations have been poor. For example, it turned out that in October of last year specialists in the Irkutsk Housing Construction Administration (V. Panteleyev, chief engineer) were unable to even take on and provide work on the right bank purification installations for the crew of assemblers from Angarsk that were sent to the aid of this collective. There were six resolutions by administrators of various ranks in the letter that the crew arrived with but they did not help the repeaters to organize the work.

The Irkutsk gorkom NK [People's Commissariat] made V. Sokolov, chief of Bridge Detachment-31 in Novosibirsk Bridge Building Trust-2 and also Yu. Abramnikov and K. Sheyndlin the directors of its subcontract organizations in the Western Siberia Electric Installation Trust and the Irkutsk Special Construction Trust severely answerable. The question of the unsatisfactory delayed construction of the urban sewerage system and purification structures has been prepared by us for review at a meeting of the CPSU gorkom bureau. The guilty parties in this will also receive their just desserts.

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CONSTRUCTION

UNSATISFACTORY RESULTS IN BUILDING STARTING STRUCTURES CITED

Moscow STROITEL'NAYA GAZETA in Russian 6 May 81 p 3

[Article: "Accelerate the Start Up of Capacities"]

[Text] The committee reviewed the results of the inspections of the programs that are being completed by the USSR Ministry of Construction of Heavy Industry Enterprises for building and putting capacities into operation for turning out anti-erosion technology and soil cultivating machinery and equipment.

The programs are not being completed satisfactorily. A great delay has been permitted in the construction of the "Kazakhssel'mash," and "Tselinogradssel'mash" plants and the Rostov "Krasnyy Aksay" cultivator plant. Having the necessary labor, material and technological resources available, the Kazakh SSR Ministry of Construction of Heavy Industry Enterprises and the Main Northern Caucasus Construction Administration did not concentrate the required number of workers, building materials and mechanisms at the starting construction sites for the Ministry of Tractor and Agricultural Machinery Building and permitted the plans that were set for the contract work to go unfulfilled.

The Kazakh SSR Ministry of Construction of Heavy Industry Enterprises and its Tselinograd Heavy Construction Trust completed only 59 percent of the plan for construction and installation work at the "Kazakhssel'mash" plant's starting structures after 10 months of last year had gone by. As a result the start up of operations for the production building with an area of 28,800 square meters was put under the threat of being disrupted. At the same time manpower and building materials were diverted from overfulfilling the plan for non-starting structures and phase two structures with the consent of the ministry and the trust. The situation is the same for construction of the "Tselinogradssel'mash" plant where only 70 percent of the plan was completed.

The Main Northern Caucasus Construction Administration in the USSR Ministry of Construction of Heavy Industry Enterprises and its trust No 7 are systematically not realizing the plans for contract work during construction of the Rostov "Krasnyy Aksay" cultivator plant. During the period indicated, while 96.5 percent of the plan was being completed for the plant as a whole, it completed only 66.5 percent of it at the starting complex for the working parts shop.

The USSR KNK [People's Control Committee] brought the attention of P. Girenko, USSR deputy minister of construction of heavy industry enterprises, to the above mentioned

deficiencies. The fact that the construction work for the above mentioned plants was not provided with the required capital investments, that design and estimate documentation was not given out on time and that the construction site was not freed on time was shown to V. Vishnyakov, deputy minister of tractor and agricultural machine building. The committee reprimanded M. Solodukhin, the Kazakh SSR deputy minister of construction of heavy industry enterprises.

His statement that the deficiencies in organizing construction and everyday services for workers that were noted by the inspection will be eliminated within two months time was taken into consideration. The official persons that were directly responsible for the failure of the programs were strictly reprimanded.

The USSR Ministry of Construction of Heavy Industry Enterprises and the Ministry of Tractor and Agricultural Machine Building must inform the USSR People's Control Committee in July 1981 about the results of the measures they are taking.

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CONSTRUCTION

NEW METHODS OF RECONSTRUCTING CEMENT PLANTS DESCRIBED

Moscow STROITEL'NAYA GAZETA in Russian 6 May 81 p 2

[Article by A. Ternovoy, chief of "Ukrtsement" Association: "According to a Third Variation"]

[Text] They are already convinced in the "Ukrtsement" Association that reconstruction of the rotary kilns and cement and raw material mills will not provide a great economic effect if it is done according to the traditional method where the individual capacity is increased separately from other process stages in the technological chain.

For example, the diameter of the rotary kilns at the Dneprodzerzhinsk cement plant was increased from 3.6 to 4 meters in 1979 to 1980. The expenditures for each kiln comprised 750,000 rubles while the hourly productivity only increased from 25 to 27.5 tons. The funds were reimbursed after four and a half years. The time period of reimbursement is even greater at the Amvrosiyevka, Zdolbunov, Kramatorsk and Nikolayev combines--from 5 to 8 years. Consequently, another method of renovating production must be chosen--based on the newest technology with fundamentally new highly productive apparatuses and machines.

While outlining ways for the technological development of the cement industry in the Ukraine during the 11th Five-Year Plan we chose our own route. The essence of it is the following: preparation of raw materials is to be done according to the traditional "wet" method, then dehydrate the residue and roast it by the "dry" method.

Why have we chosen just such a method? The aim is simple--to take the advantages from both methods of obtaining cement. The "dry" method requires a 40 percent lower consumption of fuel, reduces metal consumption by one fourth and also the consumption of fireproofing, the use of electric power, etc. The "wet" method is characterized by good technology for preparing raw materials and a comparatively low consumption of energy for processing the residue.

In general, it is possible to combine the merits of each of the methods in the process of preparing the residue and dehydrating it. Specialists in the USSR and UkSSR Ministry of the Construction Materials Industry have proposed using a vacuum filter for reducing the moisture content of the residue. Such a device, which is manufactured at the Berdichev chemical machine building plant, has been installed at the Zdolbunov cement and slate combine. It is being used for the first time in the native cement industry.

The advantages of dehydrating the residue with the aid of filter presses and spray drying chambers are confirmed in foreign practice as well. Extreme dehydration of the residue up to 17 to 22 percent is being used in Lizberg (Switzerland) and is providing a great economic effect. The residue is also being dehydrated at a plant in Oburden (France).

Transferring enterprises from the "wet" to the semi-wet method is even more advantageous because the equipment for preparing the residue that is in operation is kept after modernization. New dehydration equipment and a reconstructed kiln also go into the technological production line.

Three systems using the semi-wet method will be tested at the Zdolbunov combine. These are the partial dehydration of the residue (by 5 to 7 percent) and feeding it into a kiln together with ordinary residue (research has shown that reducing moisture in a mixture of raw materials by one percent saves one percent of fuel and increases the productivity of the kiln by 1.5 percent); the extreme dehydration of the residue to a moisture content of 20 to 22 percent which produces a "crust" and feeding it into a kiln; and the dehydration of the residue, drying it in a drumshaped drying chamber, crushing and grinding it. It is then planned that the material be fed to a dust extractor heat exchanger, a decarbonizer and a kiln. In this variation the length of the furnace is reduced by more than half. Part of the furnace is intended to be used as a drumshaped drying chamber. The productivity of the line will be increased by 40 percent based on preliminary calculations.

The adoption in industry of the method that was worked out by specialists in the "Ukrtsement" Association and the Kiev Polytechnical Institute will become the second main trend in reconstructing cement plants. It specifies a two component system: drying the residue in a special (stationary) drying chamber and decarbonizing it. The drying is done by the waste gases from the decarbonizer. The composition of the equipment makes it possible to get rid of complicated and bulky structures such as the dust extractor heat exchanger.

The trend toward "taking out" a number of technological process stages from the kiln--drying and decarbonizing the residue--is a feature of the technological approach. It is analogous to the processing of steel outside a kiln in metallurgy where metal alloys are made, refined and evaporated, etc. in the ladle. Such an experimental industrial device was installed and put into operation at the Zdolbunov combine in 1978.

The comparatively small dimensions of the drying chamber and decarbonizer, the possibility of using solid fuel and utilizing the heat from the high temperature gases from the decarbonizer in the drying chamber makes this process extremely promising. During the third quarter of this year the "Ukrtsemremont" Repair Enterprise will begin to install such equipment at the Kramatorsk cement and slate combine.

Modernization of the technological production lines for this method will make it possible to double the productivity of rotary kilns, to reduce the consumption of fuel by 40 percent, to renovate the fixed assets of such technological process stages as roasting and to equip furnaces with dust removal equipment.

CONSTRUCTION

PROBLEMS IN DEVELOPING PRODUCTION OF KOPE DISCUSSED

Moscow MOSKOVSKAYA PRAVDA in Russian 6 May 81 p 1

[Article by I. Komalova: "The Path to a New Series"]

[Text] The stress on new multistoried housing units will become a new mark of the city in the near future. At present design and construction organizations in the capital are working to create them. Cooperation between designers and builders makes it possible to achieve many of the complex tasks that were put in the Principal Directions of Economic and Social Development in the USSR for the years from 1981 to 1985 and for the period to 1990.

One of the examples of such cooperation is the joint work of specialists in the "Mosproyekt-1" Administration and the Moscow Large Panel Housing Construction Association. The association builds 2 million square meters of public space annually. Eighteen to twenty two-story housing units from the products in the Common Catalogue will be the result of its work with the designers. Their output will soon begin on a mass scale at DSK-2 [Housing Construction Combine-2].

However, if the topic were only about increasing the number of stories of housing units.... A new series of housing units is being designed and will be erected according to a new principle--from catalogue spatial planning elements (KOPE) and not from modular sections. The number of such elements is limited and constant. This is the main condition for an efficient industrial organizational structure. And the various compositions of the elements make numerous variations of housing sections that are different in the configuration and height of the housing unit--from 18 to 25 stories. Such work is being done in the Moscow Scientific Research Institute for Typical and Experimental Design (MNIITEP) where the Common Catalogue of Standard Products was also developed.

The new principle of building housing is the guarantee of diversity in massive structures. And everyone understands just what that is.

Developing products for housing units is a part of the socialist obligations of the Main Moscow Construction Administration for 1981. The DSK-2 at the Ochakov reinforced concrete components plant is getting ready to turn them out. Construction of the new shop No 4 with its auxiliary areas has almost been completed here. Initially 100 to

120 workers will work in it. Half of them are experienced production workers. For the future products are more complicated in their structural and technological features than today's. The problem of personnel is a special concern of the plant at present.

A significant portion of the foundation under the equipment, which on the whole has been obtained, has been done in the shop. The boiler and compressor areas are being expanded. The first phase of reconstruction specifies the retooling of existing forming shops. Yet, nonetheless, matters are not getting on as well as one would have hoped.

"We should have produced our first product--an item to be used during the construction of the foundation cycle of a new 18-story house--in March already," says V. Nebutov, director of the Ochakovsk reinforced concrete components plant. "But a delay came about with the forms, mechanisms and nonstandard equipment for producing them. Even though the Main Moscow Installation and Special Construction Administration and its Karacharovsk Machine Plant were obligated to partially fill our order last year already. They are operating very much behind schedule and could let us down badly."

"Much now depends also on the "Mosmekhanmontazh" Trust which is entrusted with installing the equipment in the new shop," continues the director. "In order that we do not go off schedule it is necessary for the trust to quickly increase the number of workers at our installation. The construction workers of "Mosfundamentstroy" Trust No 8, obviously not realizing all the importance of the matter, are also lagging behind the schedule approved by the Moscow soviet ispolkom."

"The failure of these organizations to meet their obligations will put DSK-2 in a very difficult situation. The current reconstruction is the largest in all history. Developing the new series and retooling production is going on at the combine simultaneously with the output of the old series of 12-story housing units. They are not expected to be removed from production until next year. There are enough difficulties even without this. For example, in determining the quantity of forming equipment to be produced, whose entire stock is changing. They are arising due to the fact that there is still no design documentation for the non-housing first floors in the new housing units. These are the non-typical floors. Built in and built on cultural and everyday enterprises and stores will be located in them. It is important that they be obtained as much as possible by industrial methods. Then the erection of such structures will not lag behind the erection of housing units.

"The design for the new series is being constantly revised. The set of sections and apartments and the technological estimates of production are being defined more accurately. Designers and builders are pondering how to ensure a smooth pace of erecting housing units with their diversity. The first experimental building will be erected in block 16 "B" southwest. Three of the seven sections are scheduled to be turned over "for occupation" by the end of the year (this is 15,000 square meters of public area); the rest have to be erected."

We wish to do the finishing of the experimental housing unit directly at the combine," said O. Yenovskiy deputy chief engineer of DSK-2, "where a group of engineers from the Moscow GlavAPU [Main Architectural and Design Administration] will be continuously working."

Eighteen to twenty-two story housing units from catalogue elements will adorn one of the blocks in Bibirev, the construction of which is expected to start next year. After having completely mastered the new series, DSK-2 will be able to put 360,000 to 380,000 [square meters] of public space into use annually.

CONSTRUCTION

WAYS OF IMPROVING TRAINING FOR CONSTRUCTION WORKERS SUGGESTED

Tallinn MOLODEZH' ESTONII in Russian 12 May 81 p 2

[Article by Kal'yu Iokhannesovich Khansteyn, ESSR deputy minister of construction:
"Two Aspects of the Same Problem"]

[Text] Much attention was given to construction problems at the 26th CPSU Congress. And this is not surprising. For construction work is housing and buildings for our leisure, it is structures for industrial and everyday use. But construction work is also people--specialists and laborers. How quickly the programs that were set in the "Principal Directions of Economic and Social Development in the USSR for the Years 1981 to 1985 and for the Period to 1990" are accomplished will depend on them. Therefore, this preoccupation with which the situation of personnel in construction is being analyzed these days is understandable. Today, in the pages of our paper, Kal'yu Iokhannesovich Khansteyn, ESSR deputy minister of construction, shares his suggestions for improving training for specialists.

The finish to the 10th Five-Year Plan was marked by labor successes for the republic's construction workers. It is sufficient to remember that after a lengthy interruption the organizations in the ESSR Ministry of Construction's enterprises met all of the principal goals last year. For example, 100.1 percent of the plan for construction work as a whole was completed, 100.4 percent of the construction and installation work and 103.5 percent of the construction commodity production. Labor productivity increased by almost 5 percent in comparison with the fourth year of the 10th Five-Year Plan. However, it has already become a tradition, when summarizing the results, to concentrate attention on the unsolved problems. Among the tasks of primary importance, in my view, is an improvement in the training of engineering and technical personnel for our ministry.

It is well known that the main forge of the ITP [engineering and technical personnel] for republic construction organizations is the Tallinn Polytechnical Institute [TPI]. It is possible to obtain five construction specialties at the evening department here as a regular or a correspondence student. During the last five-years alone "construction workers" comprised 921 of the 3,358 graduates from the college. It goes without saying that this is a substantial number. It has satisfied us both with the number of specialists and with the structure of their training until recent times. Now the

situation has changed. The new more complicated tasks that were set for construction organizations in the Principal Directions require serious changes for a whole series of problems. And first of all in the problems of training personnel.

Today there is no need to speak of the constant increase in the level of mechanizing construction work. In the age of a scientific and technological revolution this is a regular phenomenon. Yet nonetheless there is no "construction machinery and equipment" specialty at the TPI. We asked the ESSR Ministry of Higher and Secondary Specialized Education about this but there they referred to the fact that all large construction institutes in the country train specialists of this type. Send the youths there, they say, based on their assignments. However, this makes it possible to train individuals who are considered engineers and mechanics and certainly does not solve the problem since engineers with completely different backgrounds work with construction equipment and machinery in the republic. Must one say that under the given conditions for mechanizing and automating construction work, much is left to be desired in utilizing the machinery that is available?

These miscalculations and a lack of coordination must compel all organizations and institutions that are interested in training personnel for construction work to begin to seriously think. It is clear that it is impossible to put off the solution to the above problems. For a higher institution of learning trains engineers for five years. This means that we will have the specialists that are already so badly needed now during the 12th Five-Year Plan.

How do I see the solutions to the above problem? It seems that under the conditions that exist in a small republic it is expedient to reduce the number of specialties to a minimum and to graduate engineers with a broad background (as is done, for example, when training specialists for civil and industrial construction). With such an approach to the matter, with supplementary lectures, individual schedules and plans, with interest on the part of the student scientific community, specialization is possible by passing through training in general. Incidentally, such an approach is considered to be the best in the TPI construction faculty. During the current five-year plan it has already been decided here that when training engineers and construction workers one group of students will specialize in agriculture, another in design organizations.

Another side of the problem of training personnel is the "predominance" of girls in the TPI construction faculties. Let them understand me correctly--I am not against educating members of the fair sex in higher technical institutions of learning. But it seems to me that the majority of them, having decided to dedicate themselves to this or that profession, do not have a sufficient idea of the specific nature of their future work. Judge for yourselves. During the 10th Five-Year Plan 255 women completed their studies in the day department in the TPI construction faculty. Thus, every third graduate assigned to the ESSR Ministry of Construction's system is a woman. Today I can assert with complete confidence that not one works in their specialty. Various reasons are sought to decline the post of foreman, construction superintendent at a building site, chief of a section. Both women specialists with diplomas and current female students, when you talk about where they will have to work, are surprised. They have for some reason come to believe that work awaits them in a structural design bureau or in various planning organizations. In a word they count on a "desk" job only since it is hard for a woman to work at a construction site. But we can give out

such assignments only to individuals. And we prefer to give them out, as a rule, to graduates of the "Economics and Organization of Construction" department, in the economics faculty. And women are really not suited for the work at a construction site with its conditions--two and even three shift work often above the fixed hours. This frightens off specialists and the ESSR Ministry of Construction remains without such badly needed personnel.

In the meantime about 500 so-called workers who were trained on the job are working for us in engineering posts. It goes without saying that experience means quite a bit but in the age of a scientific and technological revolution specialized knowledge is required. Therefore, we are interested precisely in engineers and construction workers who have diplomas and the existing situation with the training for personnel cannot satisfy us. The solution is an improvement in professional orientation in schools, interviews before entrance examinations, and closer contact between instruction and practice. The polytechnical institute's Komsomol committees and construction organizations can and must render us much assistance. Close contact and mutual action--all of this will aid in solving the problem.

At first glance it may seem that the problems that I touched on have an extremely remote connection with the quality of construction work. But, as is well known, personnel determine the success of matters. And this was once again emphasized in the report of the 26th CPSU Congress. The complicated problems rest on the shoulders of knowledgeable, aggressive, energetic specialists. This is why the time is ripe to seriously begin thinking about the miscalculations in the ITP's training for the ESSR Ministry of Construction and, without delaying, to take radical measures.

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CSO: 1821/094

CONSTRUCTION

WORK OUTLINED FOR DEVELOPING NON-CHERNOZEM

Moscow STROITEL'NAYA GAZETA in Russian 15 May 81 p 1

[Article: "In the CPSU Central Committee"]

[Text] The CPSU Central Committee and soviet government outlined and is implementing extensive measures for developing the Nechernozem. At the 26th Party Congress General Secretary of the CPSU Central Committee L. I. Brezhnev noted that this task is so complex and urgent that it should be accomplished by the combined efforts of all the republics and in as short a period of time as possible.

Collectives of water resource management and construction organizations in Uzbekistan, Belorussia, Lithuania and Kirghiz have worked out measures and taken on obligations for participating in the erection of industrial structures, housing, cultural and day-to-day structures and roads, and for doing land reclamation work in the oblasts of the Nechernozem zone of the RSFSR.

During the 11th Five-Year Plan Uzbek SSR labor collectives in Ivanovskaya and Novgorodskaya Oblasts are scheduled to complete contract work in the amount of 150 million rubles, to put 65,000 hectares of reclaimed land into use and also more than 100,000 square meters of living space.

It is specified that land reclamation specialists and construction workers in Belorussian SSR are to put 37,000 hectares of irrigated and drained land into use in Bryanskaya and Pskovskaya Oblasts, to completely build the "Belorusskiy" sovkhos and other structures and to acquire 83 million rubles worth of construction and installation work in all.

Lithuanian SSR collectives in Smolenskaya Oblast and Kirghiz SSR collectives in Yaroslavskaya Oblast also will complete land reclamation work and the construction of various agricultural structures.

The CPSU Central Committee approved the obligations of the workers in Uzbek SSR, Belorussian SSR, Lithuanian SSR and Kirghiz SSR.

It is recommended that the union republic communist party central committees, party kraykoms and obkoms carry out the necessary organizational work for labor collectives to participate in implementing the measures for developing the Nechernozem. It is suggested that ministries and departments render assistance in every way possible to the labor collectives in fulfilling the obligations taken on by them.

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CONSTRUCTION

BRIEF

CONSTRUCTION OF UNIVERSITY VILLAGE--Construction of a "university village" was begun in Khar'kov. Classroom buildings and a dormitory for a whole group of institutes--engineering and construction, highway, pedagogical, pharmaceutical and cultural--will be located here on an area of 120 hectares. The features of the construction work are: many of the buildings, for example, a student club, main library and computer center, will be common for all the colleges. The sports complex with a light athletics arena, swimming pool and playing field will also be used in common. The overall design of the village was worked out by architects in the Ukrainian branch of "Giprovozuz." [Text] [Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 6 May 81 p 4] 9495

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